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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,885	05/25/2001	Mark Rukavina	KNWL001/00US	2287
21874	7590	04/28/2006	EXAMINER	
EDWARDS & ANGELL, LLP			JEANTY, ROMAIN	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	
			3623	

DATE MAILED: 04/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/864,885	<b>Applicant(s)</b> RUKAVINA ET AL.	
	<b>Examiner</b> Romain Jeanty	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 5-10,13-15,19-21,26-31 and 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,11,12,16,17,22,24,25,32,33,37,39-41 and 43-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office action is in response to the communication received on February 3, 2006.

Claims 1-17, 19-22, 24-41 and 43-58 are pending in the application for further examination.

### **Response to Arguments**

2. Applicant's arguments with respect to claims 1-17, 19-22, 24-41 and 43-58 have been considered but are moot in view of the new ground(s) of rejection.

### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 11-12, 16-17, 22, 25, 32-33, 37 and 39-41, 43-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al (US Patent No. 6,201,948) in view of Nunes (U.S. Patent No. 6,793,498) and further in view of DeNicola (U.S. Patent no. 6,288,753).

As per claims 1 and 49, Cook discloses a database for storing a plurality of reusable learning objects and a profile of at least one student that defines a plurality of course requirements of the student (See Figures 2 and 7; col. 4, lines 38-56) and a dynamic rendering engine responsive to the student profile and operable to assemble a subset of the learning objects for delivery to the student (See Figure 2A, 2B, 5 and 6; col. 4 line 57 through col. 5 line 3).

*Cook teaches all of the limitations above, but Cook fails to explicitly teach creating an individual course for the student by assembling.... in response to an assessment item designed to evaluate whether the student has mastered a learning objective. Nunes in the same field of endeavor discloses the concept of a preliminary assessment of a user for a learning objective (col. 14, line 19 through col. 15 line 8). It would have been obvious to a person of ordinary skill in the art to modify the teachings of Cook to incorporate the preliminary assessment of Nunes in order to provide a more effective system responsive to the needs of several parties interested in education.*

*The combination of Cook and Nunes fails to teach wherein the learning object are unassembled immediately to delivery a subset. DeNicola et al in the same field of endeavor discloses the concept of assembling a learning object (col. 6, lines 6-21). It would have been obvious to a person of ordinary skill in the art to modify the disclosures of Cook to incorporate the teachings of DeNicola in order to reinforce learning reinforcements.*

As per claim 2, Cook further discloses the system of claim 1, wherein each of the learning objects represents a discrete element of the subject matter or presentation of the e-learning course (col. 21, lines 16-30).

As per claim 3, Cook further discloses the system of claim 1, wherein the profile includes a technological capability of a computer system being utilized by the student (col. 7, lines 17-21).

As per claim 4, Cook further discloses the system of claim 3, wherein the technological capability is bandwidth available to the student for receiving the e-learning course (col. 20, lines 29-45).

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As per claim 11, Cook further discloses the system of claim 1, wherein the dynamic rendering engine delivers the e-learning course to the student via a computer network (col. 4, lines 41-45).

As per claim 12, Cook further discloses the system of claim 1, further comprising a template-based authoring engine for generating the learning objects (col. 31, lines 38-55).

As per claim 16, Cook further discloses the system of claim 1, further comprising a learning management system to manage student information and guide student learning for the student and for a plurality of students (col. 4, lines 46-56).

As per claims 17 and 50-58, Cook discloses a an authoring tool operable to create a plurality of learning objects (See Figures 2A, 2B and 3 and 5; col. 5, lines 4-62), a dynamic delivery tool operable to dynamically assemble and deliver a course page of instruction embodying at least one learning object to a student in response to a request by the student (See Figures 3, 5, and 7; col. 4, lines 38-56), and a learning management system containing a student profile of the student, wherein the dynamic delivery tool determines the at least one learning object based upon the student profile (See Figure 2(A), 2(B), 5 and 6; col. 4 line 57 through col. 5 line 3).

Cook fails to teach wherein the learning object are unassembled immediately to delivery a subset. DeNicola et al in the same field of endeavor discloses the concept of assembling a learning object (col. 6, lines 6-21). It would have been obvious to a person of ordinary skill in the art to modify the disclosures of Cook to incorporate the teachings of DeNicola in order to reinforce learning reinforcements.

As per claim 22, Cook further discloses the e-learning tool of claim 21, wherein the

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student profile includes a technical capability of a computer system used by the student to receive the course page of instruction (col. 4, lines 41-45).

As per claim 25, Cook further discloses the e-learning tool of claim 17, further comprising a database for storing the plurality of learning objects and the student profile (col. 14, lines 21-28).

As per claims 32 and 47-48, Cook discloses a first software application that receives e-learning content and categorizes the content into classes of discrete elements, each discrete element representing a separate characteristic of the e-learning course and its presentation, the classes of discrete elements having pre-defined behaviors and relationships therebetween (col. 21, lines 16-30), a second software application that receives information regarding a student's requirements for the course (See Figure 2(a), and a third software application that correlates the received information with the classes of discrete elements so as to automatically and dynamically assemble and render the discrete elements as an e-learning course customized to the individual requirements of the student (See Figure 2A, 2B, 5 and 6; col. 4 line 57 through col. 5 line 3).

As per claim 33, Cook discloses the system of claim 32, wherein the student information identifies a language preference of the student, a technological capability of a computer system used by the student to access the e-learning content, and information as to e-learning content with which the student is familiar (col. 7, lines 17-21).

As per claim 37, Cook storing a plurality of discrete learning objects within a database profile (col. 14, lines 21-28), assembling and delivering the page including at least one of the learning objects in response to an input from the user in approximately real-time to the user, based upon individual delivery parameters of the user (col. 24, lines 41-51).

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As per claim 39, the method of claim 37, further comprising: creating the learning objects by utilizing a template-based authoring tool (col. 31, lines 38-55).

As per claim 40, Cook further discloses the method of claim 37, wherein said assembling and delivering the at least one of the learning objects in response to an input from the user in approximately real-time to the user, based upon individual delivery parameters of the user, further comprises: comparing semantic elements of a subset of the learning objects with semantic elements of a plurality of profile objects that profile the individual delivery parameters of the user (col. 24, lines 15-29).

As per claim 41, Cook further discloses the method of claim 37, wherein the individual delivery parameters of the user include a language preference of the user, a technological capability of a computer system used by the user to access the e-learning content, and information as to e-learning content with which the student is familiar (col. 7, lines 17-21).

As per claim 43, claim 43 is an article of manufacture, which comprises a computer readable medium having stored thereon instructions for carrying out a system of claim 32.

As per claim 44, Cook further discloses the article of manufacture of claim 43, wherein the requirements of the user include a language preference of the user, a technological capability of a computer system used by the user to access the e-learning content, and information as to e-learning content with which the student is familiar (col. 21, lines 16-30).

As per claim 45, Cook further discloses the article of manufacture of claim 44, wherein the requirements of the user are separately stored within a database profile (col. 14, lines 21-28), and further wherein the third code segment determines the subset of learning objects by semantically matching the requirements to the subset of learning objects (col. 24, lines 15-29).

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As per claim 46, Cook further discloses the article of manufacture of claim 43, wherein the first code segment further comprises: a code segment for presenting a plurality of templates to a course developer, for entering the course content into the templates for accumulation (col. 4, lines 41-45).

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al (US Patent No. 6,201,948) in view of Nunes and further in view of DeNicola as applied to claim 17 above.

As per claim 24, Cook, Nunes and DeNicola fails to expressly disclose wherein the learning management system presents course information to the student in a form of a campus that summarizes which of a plurality of courses are available to the student and which of the available courses the student has already taken. Incorporating this feature into Cook into cook would have been obvious to a person of ordinary skill in the art because it would provide Cook's student to select a wanted desired course and at the same time prevent the student from selecting an already taken course.

#### **Remarks**

6. Applicant has amended claims 1, 17, 24, 26, 32, 43, 47, and 51 and has argued that Cook fails to teach the claimed invention. In response to applicant's arguments, applicant is directed to the new rejection of the claims above in view of Nunes (U.S. Patent No. 6,798,498) and DeNicola (U.S. Patent No. 6,288,753).



### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Ho et al (U.S. Patent No. 6,685,478) discloses a computer-aided learning methods for learners.

b. Parry et al (U.S. Patent No. 6,077,085) discloses a learning system that provides students with multiple means of learning and reinforcing steps.

c. Peter et al "A Framework for Adaptive E-Learning Based on Distributed Re-usable Learning Activities", discloses a web-based E-Learning system.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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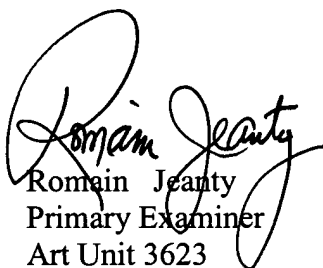
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Romain Jeanty whose telephone number is (571) 272-6732. The examiner can normally be reached on Mon-Thurs 7:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJ

April 17, 2006

  
Romain Jeanty  
Primary Examiner  
Art Unit 3623